



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/083,296      | 02/27/2002  | Seiji Suzuki         | 12010-0021          | 5525             |

7590

09/03/2004

CLARK & BRODY  
Suite 600  
1750 K Street, N.W.  
Washington, DC 20006

|          |
|----------|
| EXAMINER |
|----------|

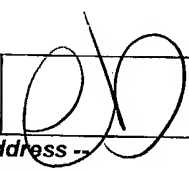
FISCHER, JUSTIN R

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1733

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                               |  |
|------------------------------|-------------------------------|-------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/083,296 | Applicant(s)<br>SUZUKI, SEIJI |  |
|                              | Examiner<br>Justin R Fischer  | Art Unit<br>1733              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Van Eperen (US 6,235,137). Van Eperen is applied in the same manner as set forth in the Non-Final Rejection mailed on March 22, 2004.

As best depicted in Figure 13, Van Eperen discloses a method of securing an elastic member to a sheet material using an adhesive, wherein said adhesive is continuously applied on the peripheral surface of the elastic member in an undulating pattern about the axis of strand member, wherein said undulating pattern is seen to constitute a sine curve shape. Also, as depicted in Figure 13, the undulating pattern has a uniform cycle. It is emphasized that Figure 13 clearly depicts the adhesive as having a drooped portion that extends further than the peripheral portion of the strand member (both on the underside or back side of the strand member and the front side of the strand member)- this clearly suggests that the height of the undulation would be substantially equal to or greater than the circumferential length of the strand member (over a given period or cycle).

As to claim 3, the claim is directed to both the use and non-use of tension as pertains to the sheet material and as such, Van Eperen anticipates this claim. It is further noted that Van Eperen suggests that the sheet material can be folded to enclose the elastic member, which suggests a certain degree of tensioning.

Regarding claim 5, the method of Van Eperen is directed to a variety of manufactured articles, including disposable articles such as disposable diapers and feminine care products.

With respect to claim 10, as best depicted in Figure 13, completely encircles the periphery of the strand member in making the sine curve shape.

3. Claims 6-9 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kwok (US 6,200,635). Kwok is applied in the same manner as set forth in the Non-Final Rejection mails on March 22, 2004.

As best depicted in Figures 3 and 4, Kwok discloses a method of applying adhesive (24, 25) to an elastic strand (70, 71) and subsequently bonding said strand to a sheet material, wherein said adhesive is applied as a continuous, undulating pattern having a uniform cycle. In particular, the adhesive pattern depicted in Figures 3 and 4 is an S-shape. Kwok further states that substantially all of the adhesive or visco-elastic material is captured on or about an elongated strand (Column 7, Lines 10-17), suggesting that the height of the undulation would be substantially equal to or greater than the circumferential length of the strand member.

As to claim 8, the claim is directed to both the use and non-use of tension as pertains to the sheet material and as such, Kwok anticipates this claim.

With respect to claim 10, the claim as currently drafted contains the language "said wearing article is one". It appears that the applicant intended this claim to be similar to claim 5. Kwok is directed to the manufacture of a variety of articles, including bodily fluid absorbing hygienic articles, such as diapers.

Regarding claim 11, Kwok states that substantially all of the adhesive or visco-elastic material is captured on or about an elongated strand (Column 7, Lines 10-17)- this description suggests that the adhesive pattern encircles the entire periphery of the strand member.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Eperen. As best depicted in Figure 13, the adhesive material is deposited on a strand member in a sine curve shape, wherein drooped portions that extend beyond the periphery of the strand member are present. These drooped portions are captured by the strand member in such a manner that substantially the entire strand member is covered. While the reference fails to provide an express disclosure for an adhesive deposition in which the undulation height is greater than the circumferential length of the strand member, it is clearly evident that the width and amplitude of the adhesive will dictate what regions of the strand are covered by the adhesive material. Van Eperen

clearly states that the traversing distance 38 (Figure 12) can be varied from a minimum of 0.1 cm up to a maximum of 0.6 cm (Column 20, Lines 34-47). In view of this disclosure, one of ordinary skill in the art at the time of the invention would have found it obvious to form an assembly in which the undulation height is greater than circumferential length of the strand member (embodiments having high traverse distance). In such an instance, the bonding area between the strand member and the substrate is increased.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwok. As noted above, Kwok suggests that substantially all of the visco-elastic material is captured on or about a strand member. In such an embodiment, the height of the undulation would be expected to be substantially equal to the circumferential length of the strand member. Alternatively, the reference recognizes that the particular width and amplitude of the adhesive material (visco-elastic material) is dependent on the configuration of the die assembly (Column 7, Lines 45-53). Thus, as depicted in Figure 4, the width and amplitude can be varied such that the height of the undulation is not necessarily equal to the circumferential length of the strand member. It is well recognized that it is highly desirable to increase the bonding area between the strand member and the substrate, such that one of ordinary skill in the art at the time of the invention would have found it obvious to deposit the adhesive in such a manner that resulted in a greater undulation height as compared to the circumferential length of the strand member. It is emphasized that Kwok recognizes that the adhesive is captured on or about the strand member, the latter referring to the underside or backside of the

strand member. Therefore, an increase in the amplitude would result in an assembly in which the undulation height is greater than the circumferential length of the strand member (regions on underside would overlap beyond the longitudinal axis of the underside) and ultimately, provide a larger bonding area between the strand member and the substrate. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the adhesive to the strand member in such a manner that the undulation height is greater than the circumferential length of the strand member.

### ***Response to Arguments***

7. Applicant's arguments filed June 14, 2004 have been fully considered but they are not persuasive.

Regarding Van Eperen, applicant contends that while the reference arguably teaches a sine curve, the undulation height does not approach the circumferential length of the strand member. As noted above, Figure 13 clearly depicts the adhesive as having a drooped portion that extends further than the peripheral portion of the strand member (both on the underside or back side of the strand member and the front side of the strand member)- this clearly suggests that the height of the undulation would be substantially equal to or greater than the circumferential length of the strand member (over a given period or cycle). Furthermore, the reference suggests that the traverse distance can be varied, wherein the larger distances would be expected to result in configurations having a larger undulation height, as compared to the circumferential length of the strand member.

As to Kwok, applicant argues that the adhesive cannot wrap around the strand member with the disclosed overlaying process. However, as noted above, the reference teaches that substantially all of the adhesive or visco-elastic material is captured on or about an elongated strand- in particular, the language "about the strand" suggests that the underside of the strand member is covered by the adhesive material. To more clearly depict such a configuration, applicant is pointed to Figures 2a and 3 of Kwok (US 6,077,375). Kwok specifically states that the fiber portions 42 and 44 extend sufficiently beyond the corresponding sides of the strand member so as to adhere to an underside of the strand (Column 4, Lines 51-60 and Column 5, Lines 3-14). It is additionally noted that the reference further mentions that in some instances the fiber portions 42, 44 may extend across the underside and upwardly along the opposing side of the strand member. Thus, Kwok '375 expressly depicts and perhaps more clearly describes the strand/adhesive assembly detailed by Kwok '635.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Justin Fischer

August 31, 2004

  
BLAINE COPENHEAVER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700